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# FARMERS' NEWSLETTER

## Feed Grains



March 81/F-17

### Making Planting Decisions

In making final plans on how many acres of your main crops to plant this spring, consider what factors will affect your returns in the fall.

- Market prices.
- Government programs.
- The cost and availability of fuel, fertilizer, chemicals, seed, and just as important, financing.
- The condition of your soil after the crops of last year, the chemicals you applied, and the subsoil moisture supply.

Supply prospects will be a big factor, as usual. Earlier this year, farmers in 16 southern and western States indicated plans to cut corn acreage 2 percent and sorghum and barley 6 percent each, while increasing oats 3 percent. Soybean acreage might gain 1 percent. Last year these States accounted for only 13 percent of total corn acreage.

On March 19, USDA will report planting plans of farmers in 36 States as of March 1.

Feed grain stocks on January 1 were 16 percent under the year-earlier mark, and by this fall are expected to slump nearly 60 percent below last season's level to the lowest reading in 6 years. Carryover stocks of soybeans next fall may be 39 percent under last season's record large 359 million bushels.

Look at these acreage and supply estimates and adjust your plans to take advantage of the patterns you see.

### Corn Versus Soybeans

A particularly important planting consideration is the tradeoff between corn and soybeans in those areas of the country where growing both is a reasonable option and you have the necessary equipment.

As a rough guide in your decision-making, returns from corn and soybeans are often considered comparable when the soybean price is about 2.5 times the price you'd get for corn. This is just a rule of thumb and is based on national average prices, costs, and yields.

Make a better evaluation of your planting choices by figuring what your corn and soybean yields may be, your production costs, and what you think these crops will bring after the 1981 harvest. You may find that the 2.5 idea doesn't hold up on your farm.

Let's set up an example to help you in considering the alternatives on your own farm.

USDA forecasts national average corn prices this year between \$3.25 and \$3.60, and \$7.25 to \$8.50 for soybeans.

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The next feed grains newsletter is scheduled for mid-May.

However, you will probably be selling the crops you plant this spring in the marketing year which begins September 1 for soybeans and October 1 for corn. So your real concern is what prices may be afterwards. But for purposes of illustration we will go ahead and use 1980/81 estimates.

Since costs of machinery ownership, farm overhead, management, and land go on irrespective of the crops you plant this year, they are not considered in the examples below. It's the costs which vary from crop to crop, such as seed, chemicals, and labor that are important in your decisions. The per-acre variable costs and the yields used in the examples are for illustration. Your costs and yields may be quite different.

Item	Corn	Soybeans
Price	\$3.25 - \$3.60	\$7.25 - \$8.50
Variable costs/acre	\$155	\$80
Yield bu./acre	100	30

Suppose you expect to sell soybeans for \$8.50 a bushel. What corn price would be needed to match net returns from soybeans? Calculate as follows:

\* Returns per acre from soybeans:

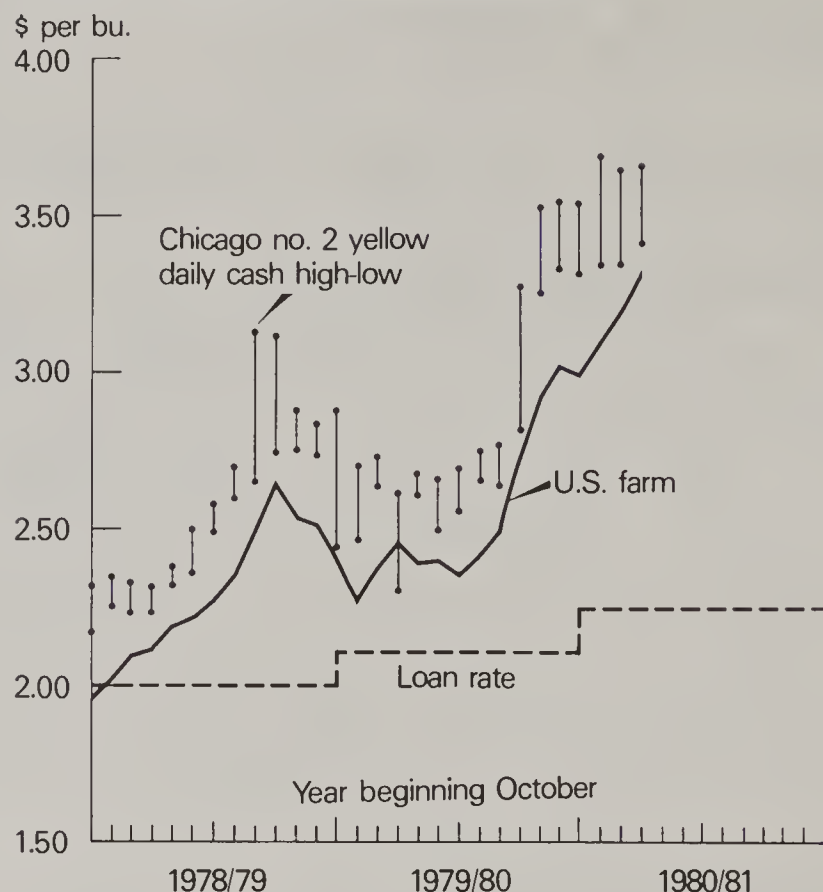
$$(\$8.50 \times 30 \text{ bu.}) - \$80 = \$175$$

\* The price of corn needed to match these returns from soybeans is figured this way:

$$\text{Corn price} = \frac{\$175 + \$155}{100 \text{ bu.}} = \$3.30 \text{ bu.}$$

This means that with costs and yields used in this example and soybeans at \$8.50, your returns per acre would be the same from either crop if corn were \$3.30. The breakeven soybean/corn

## CORN PRICES RUNNING STRONG



price ratio in this case is \$8.50 divided by \$3.30, or 2.58 to 1. If corn prices were more than \$3.30 a bushel, your net returns would be higher by planting corn.

Now what if you expect to sell soybeans for \$7.25? When you work through the calculations you'll find a corn price of \$2.92 would match the returns from soybeans. Here the breakeven price ratio is \$7.25 divided by \$2.92, or 2.48 to 1.

## The Sorghum Option

If you farm where corn and soybeans are often damaged by drought, consider turning to sorghum, although per-acre returns are considerably lower than for the other two. USDA forecasts the 1981 sorghum price range from \$3.15 to \$3.45. Assume variable costs of \$80 per acre, and an estimated yield of 55 bushels per acre.

At \$3.15 per bushel, the return would be \$93, or \$110 if sorghum reaches \$3.45 per bushel. It'll pay to pencil out the situation for your farm.



## FARM PRICES WELL ABOVE A YEAR AGO

	1979/80	1980/81 <sup>1</sup>
	Dollars per bushel	
Corn . . . . .	2.52	3.25 - 3.60
Sorghum . . . . .	2.34	3.15 - 3.45
Barley . . . . .	2.29	2.65 - 2.85
Oats . . . . .	1.37	1.60 - 1.80

<sup>1</sup> Estimated.

### Barley and Oats as Alternatives

Returns from barley and oats typically are much lower than other feed grains. But they are useful in crop rotation programs and grow in areas where other feed grains won't.

The projected price range for barley is \$2.65 to \$2.85, with variable costs at \$73 per acre, and an estimated yield of 46 bushels. This means returns per acre could be from \$49 to \$58.

The situation for oats indicates prices between \$1.60 and \$1.80, variable costs of \$56, and yields averaging 51 bushels. Returns per acre under these factors would be between \$26 and \$36.

### Look At Expected Market Supplies

In considering what direction grain and soybean prices may take in 1981/82, you'll have to watch world crop and economic conditions.

Right now supplies look tight. Prospects point toward 1980/81 U.S. and foreign coarse grain carryover stocks of 56 million metric tons, down from 88 MMT a year earlier. Total world soybean carryover stocks are projected at 14.9 MMT, against 18.5 MMT last year.

This is the prospect now despite current tentative indications for larger plantings of wheat and coarse grains

(corn, sorghum, barley, oats, millet, and rye) which will increase world production above utilization, if yields are near trends.

Another year of below-average yields would further deplete U.S. grain and oilseed stocks, and cause sharply higher prices. And any production shortfalls in foreign countries would have to be partly made up by U.S. exports, further boosting prices. On the other hand, generally favorable growing conditions in major producing countries would lead to smaller U.S. sales and possibly lower prices. Stocks would build, making the farmer-owned reserve more important to you.

To date, the soybean crops in Brazil and Argentina have benefited from excellent weather and record production of slightly over 19.1 million metric tons (702 million bushels)--3 percent more than last year's record--appears within reach. These crops will go on the world market beginning this spring. This prospect, along with high interest

### CORN STOCKS: LARGE DRAWDOWN AHEAD



△ Figures for 1979/80 are preliminary and 1980/81 are projected as of February 12, 1981.  
○ Includes corn used for food, seed, and industry.

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## U.S. FEED GRAIN STOCKS TO DROP SHARPLY

	1979/80	1980/81	
	Estimated	Projected	Range
Million metric tons			
Beginning stocks . . .	46.2	52.4	
Production. . . . .	238.2	198.2	
Supply, total. . . . .	284.7	250.9	
Feed . . . . .	139.4	131.2	+ 9 to - 9
Food, seed, and industrial uses. . . .	21.6	24.1	+ 1 to - 1
Domestic use, total . .	161.0	155.3	+ 9 to - 9
Exports. . . . .	71.3	74.2	+ 6 to - 6
Use, total. . . . .	232.3	229.5	+13 to -13
Ending stocks . . . . .	52.4	21.4	+ 7 to - 4
As of February 12, 1981.			

rates and slack demand for soybeans in the European Community, sharply cut U.S. prices in late 1980 and led to a drop in USDA price estimates for 1981.

## Special Considerations

The farmer-owned reserve is open to the four feed grains, wheat, and rice when prices are below the call level. There is no reserve for soybeans. Farmers receive annual payments for storing grain in the reserve and

interest charges for reserve loans have been waived. You may want to take this difference between feed grains and soybeans into account in making your planting plans.

Soybeans need less moisture during the growing season than corn, and they don't have a period in which moisture and temperature conditions are as critical as for corn in tassel. That's something to consider if moisture is short this spring.

Take a look at futures market quotations to see how current trading is pricing corn and soybeans for delivery near the beginning of the 1981/82 marketing year. In late February, a Chicago Board of Trade soybean contract for January 1982 delivery was near \$8.35. That's 2.24 times the \$3.72 contract price for December 1981 delivery of corn.

Price quotations for such distant futures often fluctuate widely during the lifetime of the contracts, as they reflect changes in market outlook of buyers and sellers. Up to late February, the range of the January 1982 soybean contract was from \$7.64 to \$9.16 and the December 1981 corn tract range was from \$3.32 to \$3.91.